Listing of the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1.-16. (Canceled).

17. (Currently amended) A ~~An improved~~ method for injecting a pharmaceutical agent into the tissue of a living host, the method comprising:

positioning a catheter longitudinally within a lumen of a blood vessel;

~~using a needle positioned from a lumen of a blood vessel, wherein the improvement comprises:~~

advancing a ~~positioning the~~ needle radially outwardly from the catheter ~~blood vessel lumen~~ through the blood vessel wall and past an external elastic lamina (EEL);

confirming that a delivery aperture of the needle has radially penetrated into adventitial tissue beyond the external elastic lamina (EEL) of the blood vessel, wherein confirming comprises injecting contrast media through the needle aperture and observing whether (a) the media spreads longitudinally along the outside of the vessel wall indicating that the aperture is in adventitial tissue or (b) the media is constrained within the wall of the blood vessel indicating that the needle aperture has not reached the adventitial tissue ; and

injecting the pharmaceutical agent through the needle into the tissue if it has been confirmed that the aperture of the needle is positioned in adventitial tissue beyond the external elastic lamina (EEL).

18.-29. (Canceled).

30. (Previously presented) A method as in claim 17, wherein the needle is positioned so that a penetration distance of the delivery aperture of the needle beyond the EEL does not exceed 5mm.

31. (Previously presented) A method as set in claim 30, wherein the agent distributes longitudinally along the blood vessel over a distance of at least 1 cm and radially by a distance of at least 1 cm or within a time period no greater than 60 minutes.

32. (Previously presented) A method as in claim 31, wherein the concentrations of agent at all locations spaced at least 2 cm from the delivery site are at least 10% of the concentration at the delivery site.

33. (Previously presented) A method as in claim 30, wherein the agent distributes via the lymphatic system surrounding the target.

34. (Previously presented) A method as in claim 30, wherein the aperture of the needle is positioned at a distance less than 5 mm beyond the EEL .

35. (Previously presented) A method as in claim 34, wherein pharmaceutical agent comprises a small molecule drug, a protein, or a gene.

36. (Previously presented) A method as in claim 35, wherein the agent has a maximum dimension of 200 nm or below.

37. (Previously presented) A method as in claim 30, wherein the blood vessel is a coronary blood vessel.

38. (Previously presented) A method as in claim 35, wherein the coronary blood vessel is an artery.

39. (Previously presented) A method as in claim 38, wherein the coronary artery is at risk of hyperplasia.

40. (Previously presented) A method as in claim 38, wherein the coronary artery has regions of vulnerable plaque.

41. (Previously presented) A method as in claim 30, wherein the patient is suffering from congestive heart failure or a cardiac arrhythmia.

42. (Previously presented) A method as in claim 30, wherein the blood vessel is a cerebral blood vessel and the tissue is in the brain of the host.

43. (Previously presented) A method as in claim 30, wherein the blood vessel is a hepatic blood vessel and the tissue is in the liver of the host.

44. (Previously presented) A method as in claim 30, wherein the agent is being delivered to treat a neoplastic disease in the tissue.